BPA AND Y2K

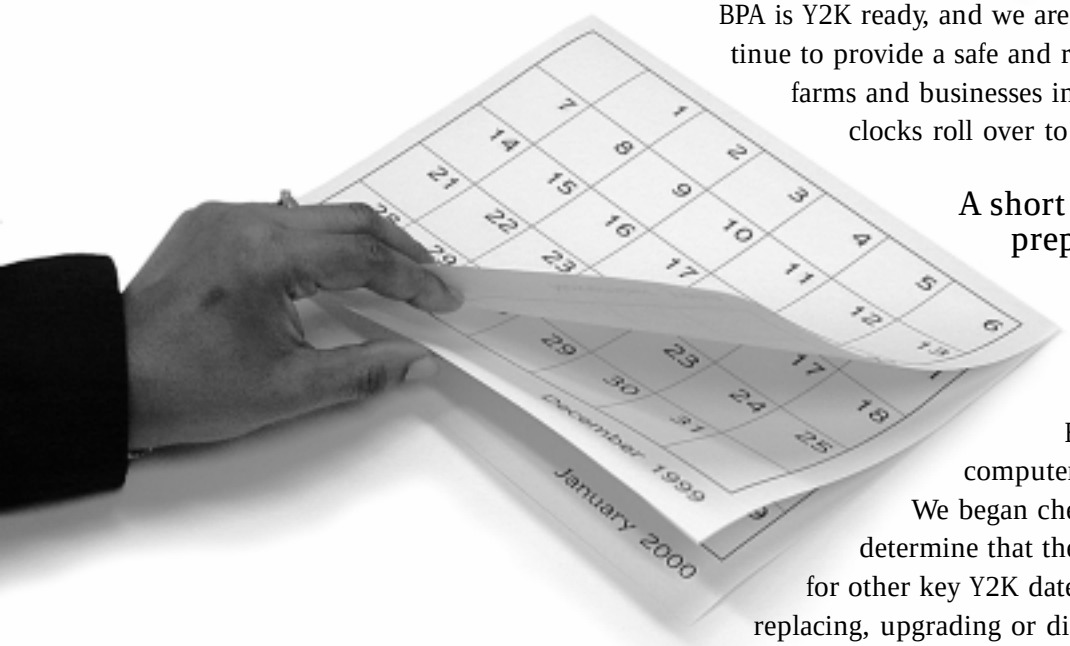
NOVEMBER 1999

A quarterly status report for BPA customers, constituents, employees and the public on BPA's Year 2000 readiness

Counting down. . .

The New Years Eve we've all been waiting and preparing for is drawing near. And BPA is looking forward to watching our methodical Y2K preparations of the last four years yield good results.

BPA is Y2K ready, and we are confident that our system will continue to provide a safe and reliable power supply to the homes, farms and businesses in the Pacific Northwest when the clocks roll over to Jan. 1, 2000.



A short history of BPA's Y2K preparations

Conscious of its important responsibility to the region, BPA started its Y2K preparation early and never let up.

Beginning in 1995, BPA inventoried its computer systems and automated equipment. We began checking the programs not only to determine that they read 01/01/2000 correctly, but also for other key Y2K dates as well. BPA began to plan for replacing, upgrading or discontinuing systems as needed to prepare for Y2K.

We followed a five-point Y2K readiness plan:

1) Use a methodical process to find/fix Y2K problems;
2) Increase scrutiny on critical systems for power supply and transmission reliability;
3) Coordinate with entities that have significant effect on power generation and transmission;
4) Develop contingency plans for operating the transmission system; and
5) Develop comprehensive business continuity plans.

BONNEVILLE POWER ADMINISTRATION

Progress Report: BPA's Y2K Readiness

(This status report will be updated and printed in every issue of *BPA and Y2K*.)

Milestones	Target	Status
Conduct inventory	August 1998	Completed July 1998
Develop Y2K testing guidelines	August 1998	Completed August 1998
Assess risk	September 1998	Completed October 1998
Develop test plans	October 1998	Completed October 1998
Test components	January 1999	Completed January 1999
Test systems and implement Y2K solutions (including re-testing)	March 1999	Completed March 1999
Refine Contingency Plans,	Ongoing	Ongoing through

BPA set March 31, 1999, as our target for being Y2K ready. In-house technical experts methodically checked computer systems and equipment for applicable Y2K dates, remedied if necessary, and tested again. They checked off each "due date" on the readiness plan. (See box, Progress Report.)

On March 31, 1999, BPA announced that it was Y2K ready. According to our own readiness plan (on our Web site at www.bpa.gov), BPA's "hardware (including embedded chips), software, applications and integrated

Chronology: A Y2K Timeline

Sep. 1998: The North American Electric Reliability Council (NERC), after reviewing data from 75 percent of the nation's electric power suppliers, reports to the Department of Energy that it is "cautiously optimistic" that the nation's power system will experience no major disruptions on Jan. 1, 2000.

Jan. 1999: On Jan. 11, NERC issues its second quarterly report to DOE on the Y2K preparations of the nation's electric power industry. NERC has data from virtually all (98 percent) of the 3,200 electric suppliers in the U.S. and Canada. "The types of impacts found thus far," NERC says, "do not appear to affect the ability to keep generators and power delivery facilities in service and electricity supplied to customers."

- **1/1/99 was a key Y2K date** because many computer programs process data by looking forward one year and counting dates back from that point. If such systems have two-digit date problems that are not corrected in time, they could have malfunctioned or failed at the start of 1999. **BPA passed.**

March 31, 1999: BPA announces that it has met its commitment to be Y2K ready by March 31, 1999. BPA's federal generation partners, the U.S. Army Corps of Engineers and the Bureau of Reclamation, announce they are Y2K ready as well. Secretary Richardson calls BPA's readiness ". . .a superb example of commitment. . .and plain hard work."

April 9, 1999: NERC holds its first nationwide Year 2000 drill. It tests back-up communications, voice communications and manual procedures that could be used should regular voice and data communications on the power system fail. BPA discovered no problems that would disrupt power system operations.

- **4/9/99 is a key Y2K date** because it is the ninety-ninth day of 1999: Some com-

September 1998	October 1998	November 1998	December 1998	January 1999	February 1999	March 1999	April 1999

"BPA recognizes that the Pacific Northwest counts on the safe and reliable operation of our power system, and based on our thorough and methodical Y2K preparations, we are highly confident that the BPA power system will continue to operate reliably and safely on Jan. 1, 2000."

Judi Johansen
BPA Administrator

systems … [has been] assessed and determined to be functional into and through the year 2000."

Expanding the scope of our Y2K readiness

BPA didn't stop there. BPA subjected its Y2K preparations to two independent audits. The audits verified that BPA had properly followed the methodical steps outlined in its Y2K plan and that its Y2K readiness documentation was in order.

Contingency planning and drills continued throughout the summer and fall of 1999. BPA participated in nationwide Y2K drills and furthered its Y2K "clean management" efforts. (See story on page 4.)

Meanwhile, BPA passed three Y2K dates that many thought had the potential to confuse computers….without disruption to the power system.

Staying Prepared

As the key Y2K date nears, BPA's Y2K team continues to prepare. It's focusing on public information, clean management, continued contingency planning and coordinating with other power systems that interconnect with BPA's. And

April 1999: NERC reports that more than 75 percent of testing and remediation is complete. "As we near the home stretch in this race to 2000," says NERC president Michehl R. Gent, "we believe it is becoming increasingly clear that electric customers nationwide will come up winners."

July 1, 1999: Energy Northwest announces that the nuclear plant WNP-2 is Y2K ready.

Aug. 1999: NERC announces that the electric utility industry is Y2K ready. "If the transition to the year 2000 occurs tonight, the electric utility industry would operate reliably with the resources that are Y2K ready now," says NERC.

Sep. 8-9, 1999: NERC holds its second nationwide Year 2000 drill. It simulates an actual midnight rollover and tests backup and contingency plans. BPA experiences no problems that would disrupt power system operations.

DOE Secretary Richardson visits the Northwest and participates in the drill from one of BPA's control centers. Richardson affirms that "the nationwide test went smoothly and contingency plans, including back-up communications systems, appeared in order," but he admonishes utilities to continue "to be diligent in testing."

- **9/9/99 was a key Y2K date.** A common programming device was to enter 9999 as a signal that a stack of data had reached its end. This signal may sometimes have been programmed on date fields, with the result that the date 9/9/99 will have a special — and unintended — meaning in a program. **BPA passed.**

Sep. 29, 1999: The Nuclear Regulatory Commission notifies Energy Northwest that nuclear plant WNP-2 has met Commission requirements for Y2K readiness.

Nov. 15, 1999 through Jan. 15, 2000: BPA freezes implementation of new computer hardware, software or integrated systems, including upgrades or modifications.

May 1999	June 1999	July 1999	August 1999	September 1999	October 1999	November 1999	December 1999

BPA hasn't stopped Y2K testing and upgrading. On New Years Eve, systems will be in place. Says Chief Information Officer Joe O'Rourke, "On the rollover weekend, BPA will have the necessary staff on location to deal with any event, so we can continue to provide safe and reliable power to the Pacific Northwest."

BPA staff at the substations and control centers will operate BPA's system so we have even more "cushion" than normal. We will be operating with more power and transmission in reserve, we will reduce transactions with other power systems and limit traffic on the transmission grid.

BPA will regularly monitor developments and communicate with other power systems on the West Coast transmission grid as well as throughout the nation and the world.

Recently, the Secretary of the Department of Energy (DOE) Bill Richardson announced that DOE will staff its Emergency Operations Center around the clock between Dec.r 28 and the first several days of January 2000. "I have directed senior-level DOE staff [to be at the center to watch] all domestic and international energy sector activities in order to provide real-time reports on the national Y2K situation," Richardson said.

"Clean Management"

A major focus of BPA's Y2K readiness program as 1999 winds to a close is "clean management." BPA acquires new components, updates systems and repairs equipment continually in order to maintain efficient and reliable operations. Clean management means that when a system is somehow changed, BPA again checks for Y2K readiness.

Clean management has these basic components:

- When BPA repairs, modifies, or upgrades date-sensitive equipment or computer programs, the equipment will be re-tested after the repair to determine that the repair did not introduce a Y2K problem. Changes are documented.
- New software programs, computer hardware, date-sensitive equipment or components that BPA purchases after March 31 will be type tested for Y2K readiness before they are put into production.
- BPA works with our suppliers and contractors on our strict standards for Y2K monitoring and testing. We include provisions in many of our contracts for Y2K readiness disclosures.

All is in Readiness

While BPA will continue to update and refine contingency plans and business continuity plans through Dec. 31, 1999, we are Y2K ready. For years, we've planned, inventoried, tested, remediated, verified, drilled, coordinated and informed on Y2K. We've prepared carefully and expertly because we know we are entrusted with a crucial responsibility to provide safe and reliable power to the Pacific Northwest. On Dec. 31, 1999, we are confident we will continue that tradition.

Information in *BPA and Y2K* is provided in line with the Year 2000 Information and Readiness Disclosure Act, which "…encourages the disclosure and exchange of information about computer processing problems, solutions, test practices and test results, and related matters in connection with the transition to the year 2000."

BPA and Y2K is published quarterly. For additional copies or to add a name to the mailing list, please call BPA's Public Information Center, at 1-800-622-4519. Also, visit our Web site at *www.bpa.gov.*; there is a Y2K button on our home page.

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